

Remarks/Arguments

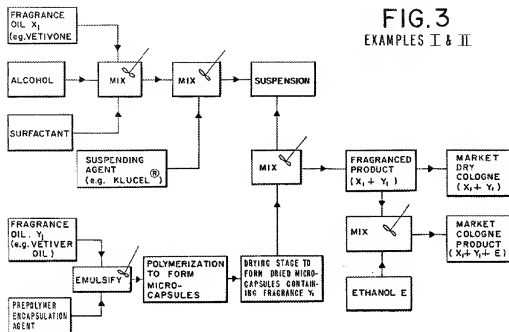
As of the Office Action of November 3, 2006, claims 7, 9, 10 and 12-20 remain pending. A minor amendment has been made to claim 7 to further clarify that the structuring agent is dispersed in the polymer material. In addition, the claim has been amended to recite that the average particle size of the dispersed structuring agent is from about 0.1 to about 1.0 μm . Support can be found at paragraph [0040] of the published application. No new matter has been entered.

Claims 7, 9, 10, and 12-20 have been rejected under 35 USC 103 as either being unpatentable over Munteanu et al. (U.S. Patent No. 4,428,869).

At page 2 of the Office Action there is a summary of the art rejection as follows:

“In reference to claim 7, Munteanu discloses a composition of matter in the shape of a microcapsule comprising of a core component physically entrapped (i.e. encapsulated) in solid particles (polymer material) which are further entrapped in a suspending agent (structuring agent); wherein the shell component is considered to be the solid particles covered in the suspending agent.”

Applicants agree with the Examiner characterization of Munteanu, in the sense that Munteanu discloses a core component that is indeed encapsulated with polymer material. Reference is made to **FIG. 3** of Munteanu et al, which is reproduced below for convenience:



Munteanu teaches that with respect to what is termed the “non-confined fragrance” such is prepared according to the upper portion of **FIG. 3**, and involves mixing of the fragrance with alcohol and a surfactant, and then a suspending agent. Munteanu also teaches that with respect to forming the “entrapped fragrance” such is formed by the lower portion of **FIG. 3**, which specifies combining the fragrance with a prepolymer, emulsifying, polymerizing and drying. Then, Munteanu teaches that the “non-confined fragrance” and “entrapped fragrance” are mixed to form the fragrance product, which may be marketed as a dry cologne, or mixed with ethanol and also marketed as a cologne product. In addition, important to consider is that Munteanu teaches that necessarily, the “entrapped fragrance” is one that “is releasable either hydrolytically (as a result of contact with excreted sweat) or by means of application of mechanical pressure.” See, col. 8, lines 7-16 of Munteanu.

Applicants therefore have reproduced below claim 7 as pending, and wish to point out a number of features of claim 7 that are not believed to be disclosed or suggested by Munteanu:

Claim 7. A microencapsulated material, comprising:

a core component, wherein said core component is at least one of oxygen sensitive or water sensitive; and

a shell component encapsulating said core component, wherein said shell component comprises a polymer material and a structuring agent having an average particle size from about 0.1 to about 1 μ m dispersed into said polymer material at a level of about 1 to 50 % by weight of the shell component, wherein said polymer material comprises pendant ionic groups that form an ionic bridge with said dispersed structuring agent, wherein said structuring agent decreases oxygen and water permeability through said polymer material.

It is hopefully clear that as understood, Munteanu does not teach or suggest the use of the disclosed suspending agent (which has been equated to the recited structuring agent) as being dispersed in the polymer that is employed to form that part of what Munteanu describes as the “entrapped fragrance.” Nor does Munteanu teach or suggest that the dispersed particles are those that have an average particle size from about 0.1 to about 1 μ m. In addition, as noted, Munteanu emphasizes that the polymer of the entrapped fragrance is such that it relies upon a polymer that is hydrolytically unstable, which Applicants believe as being contrary to the use of a structuring agent, dispersed in a polymer, at 1-50% by weight, where the structuring agent decreases water permeability.

Applicants note fully the comments at page 3 of the Office Action where the Examiner indicated that she had consider the newly added limitation of claim 7 (the structuring agent being dispersed in the polymer) and the comment that “Munteanu discloses that the core material is encapsulated in the polymer material via a variety of methods, such as suspension polymerization, emulsion polymerization, coacervation or via a cellular matrix.” However, as

noted above, the core material of Munteanu (the fragrance) is encapsulated in a polymer material, and there is no suspending agent dispersed in the polymer material utilized to form the “entrapped fragrance” portion of the Munteanu product.

The Examiner then comments that “Munteanu does not disclose the presence of the structuring agent in the continuous phase or that the resulting microcapsule shell comprises a dispersion of the structuring agent in the polymeric material.” Applicant agrees. Then it is written that “it would have been obvious to one of ordinary skill in the art...to have included the structuring agent in the polymeric continuous phase during the formation of the microcapsules, in order to include an agent, as disclosed above, [that] is capable of decreasing the oxygen and/or water permeability of the polymeric material, and assists in preservation of the core component.”

Respectfully, it is not understood how one can reasonably step to any conclusion that based upon Munteanu, one of ordinary skill in the art would be inclined to have included Munteanu’s suspending agent as a dispersed continuous phase in the polymeric component that is relied upon to form the “entrapped fragrance” portion of the Munteanu product. As noted, Munteanu teaches that with respect to the entrapped fragrance portion, one should utilize a polymeric shell that is hydrolytically unstable and releases fragrance upon contact with sweat.

Finally, Applicants also considered the comments at paragraph 10 of the Office Action of November 3, 2006, which suggests that one of ordinary skill in the art would have considered it obvious to include 1-50% of a structuring agent in the polymer material. Again, this is not believed reasonable, as Munteanu disclosed that the suspending agent was not part of the polymer material utilized to form the “entrapped fragrance” portion of the Munteanu product. In addition, this is not believed reasonable given that Munteanu emphasized the use of polymer

resins that were hydrolytically unstable, as opposed to a polymer/structuring agent combination that, as recited in claim 7, is one that decreases oxygen and water permeability through said polymer material.

In light of the above, Applicants respectfully submit that claims 7, 9, 10 and 12- 20 are not taught or suggested by the cited references. In consideration of the foregoing Applicants respectfully requests that the rejections of claims 7, 9, 10 and 12-20 are withdrawn upon reconsideration.

Having overcome all of the outstanding rejections, it is respectfully submitted that the application is now in condition for allowance. Early and favorable action is respectfully solicited.

In the event that there are any fee deficiencies, or additional fees are payable, please charge, or credit any overpayment to, our Deposit Account No. 50-2121.

Respectfully submitted,

/Steven J. Grossman/

Steven J. Grossman
Attorney for Applicant(s)
Reg. No. 35,001
Grossman, Tucker, Perreault & Pflieger, PLLC
55 South Commercial Street
Manchester, New Hampshire 03101
Tele: 603.668.6560